Remote Sensing Applications Division (RSAD)
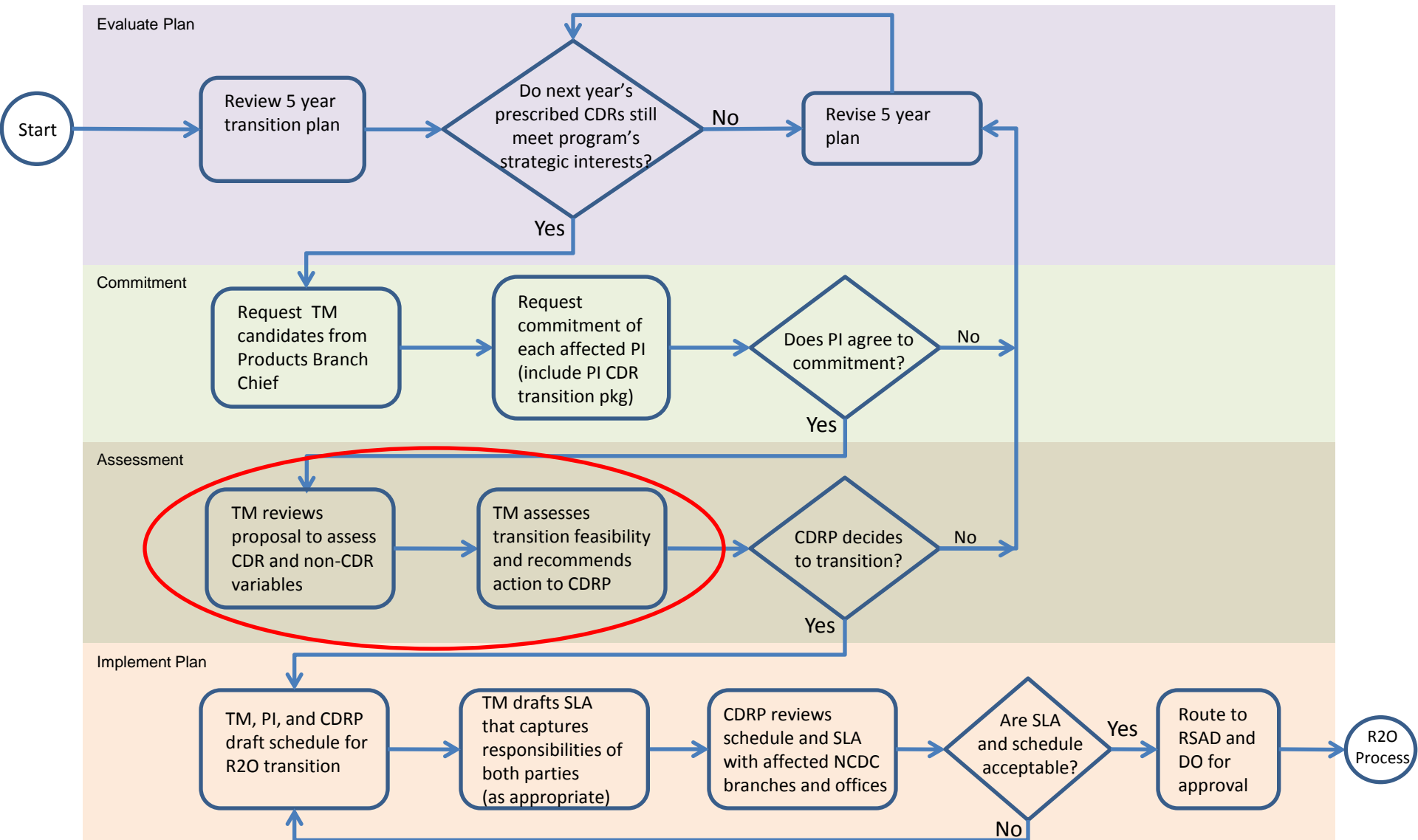
CDR Program Office

Weekly Report for Nov 10, 2011
John J Bates, Chief

R2O Selection Process

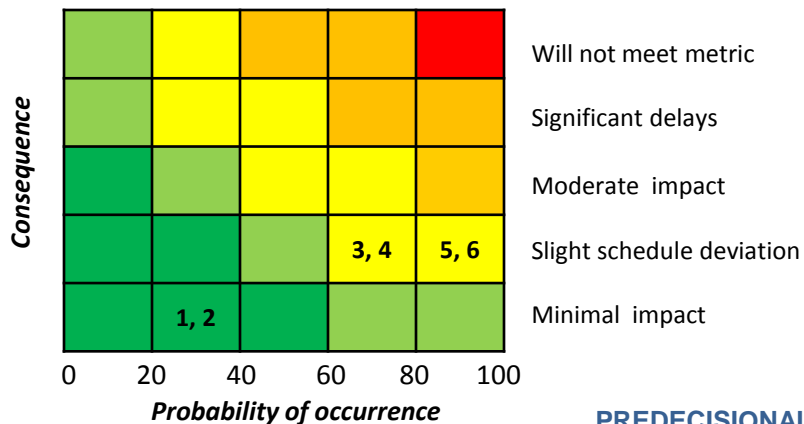**Evaluate Plan**

Start → Review 5 year transition plan → Do next year's prescribed CDRs still meet program's strategic interests? — No → Revise 5 year plan

Yes ↓

Commitment

Request TM candidates from Products Branch Chief → Request commitment of each affected PI (include PI CDR transition pkg) → Does PI agree to commitment? — No

Yes ↓

Assessment

TM reviews proposal to assess CDR and non-CDR variables → TM assesses transition feasibility and recommends action to CDRP → CDRP decides to transition? — No

Yes ↓

Implement Plan

TM, PI, and CDRP draft schedule for R2O transition → TM drafts SLA that captures responsibilities of both parties (as appropriate) → CDRP reviews schedule and SLA with affected NCDC branches and offices → Are SLA and schedule acceptable? — Yes → Route to RSAD and DO for approval → R2O Process
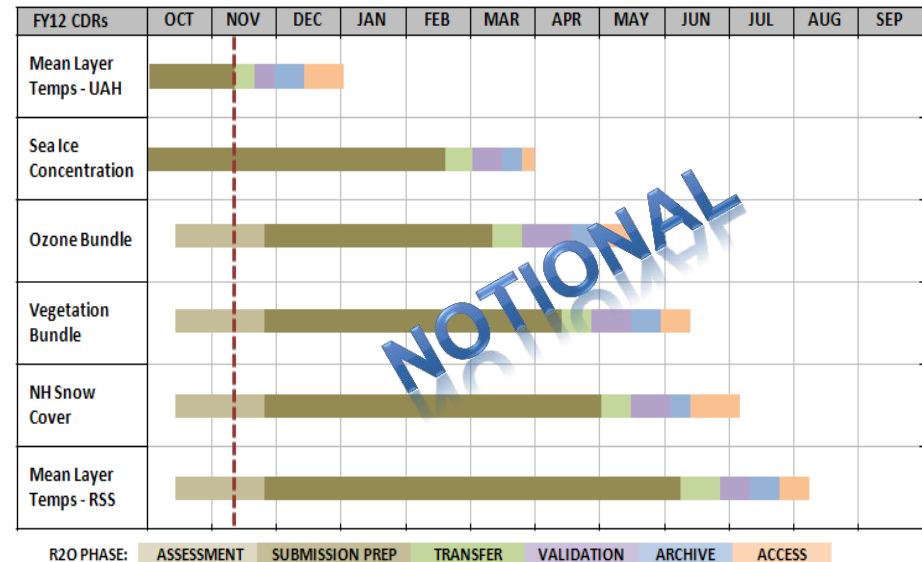
No

Weekly Report – Nov 10, 2011

● ① **Mean Layer Temperatures – Univ of Alabama Huntsville (UAH)**
  • Received CATBD – CDR in final review

● ② **Sea Ice Concentration**
  • Archived data set – CDR in final review

↑ ③ **Ozone Bundle**
  • TM has submitted initial assessment

↓ ④ **Vegetation Bundle**
  • Met with PI at CICS meeting

● ⑤ **Northern Hemisphere Snow Cover**
  • Letter sent to PI

↓ ⑥ **Mean Layer Temperatures – Remote Sensing Systems (RSS)**
  • Met with PI at CICS meeting

● No change   ↑ Increasing Risk   ↓ Decreasing Risk

R2O Schedule

FY12 CDRs	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Mean Layer Temps - UAH												
Sea Ice Concentration												
Ozone Bundle												
Vegetation Bundle												
NH Snow Cover												
Mean Layer Temps - RSS												

NOTIONAL

R2O PHASE: ASSESSMENT | SUBMISSION PREP | TRANSFER | VALIDATION | ARCHIVE | ACCESS

Risk Matrix

Consequence (y-axis, top to bottom):
- Will not meet metric
- Significant delays
- Moderate impact
- Slight schedule deviation — 3, 4 | 5, 6
- Minimal impact — 1, 2

Probability of occurrence (x-axis): 0 20 40 60 80 100

Risk and Mitigation

• **Branch chiefs should review suggestions from the lessons learned meeting and decide on any changes to process or requirements**

• **Letters sent to PIs requesting they support the R2O process**
  - **Talked to Vermote and Mears in person at CICS meeting**

• **Need to solidify what each of the CDRs are and how the CDR bundles are going to work –decided CDRs should be based on a distinct taxonomy, which Shaida is compiling from the meeting discussions**

PREDECISIONAL DRAFT INFORMATION

FY12 TCDR - Mean Layer Temperatures - UAH

CDR Product: TCDR - Monthly gridded anomalies for three layers (LT, MT, LS), 1978-2010 (60 GB)
GEOSS Societal Benefit: Energy, Climate, Ecosystems

Project Status

- Ran code complexity assessment tool on source code package
- PI and team have sent source codes, flow chart, and MM
  - source code submitted for security review
- Received completed CATBD from Christy
  - Reviewed, Put in Library, and archived
- THREDDS access to data available
- **Ready to go live once final CDRP review completed**

Next Action / Milestone

- Archive all parts (9/27) – done
- Get data on THREDDS (9/27) – done
- Put CDR package on web site (TBD) - ready

(G)

Project Risks

- None

ID	Task Name	Status	Start	Stop	FY11 Q2			FY11 Q3			FY11 Q4		
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Initial Assessment	100	1/1/2011	1/15/2011									
2	Transfer Prep	100	1/15/2011	8/31/2011									
2a	Comment Source Code	100	1/15/2011	7/29/2011									
2b	Create Docs (CATBD, Flow Chart, MM, Readme)	100	3/15/2011	8/31/2011									
2c	Convert from ASCII to NetCDF	100	4/30/2011	8/24/2011									
3	Tranfer Code, Docs, and Data	100	6/21/2011	8/31/2011									
4	Verify Code, Docs, and Data	100	7/15/2011	8/21/2011									
5	Archive Code, Docs, and Data	100	8/7/2011	9/2/2011									
6	Provide Access to Code, Docs, and Data	95	9/1/2011	9/14/2011									

Mean Layer Temperatures

CDR - PI	TM	AB	OPS	Access	What	Who	NLT date	Status	ECD
MLT - Christy	Lei	Jones	Robert	Ansari	Decide which products to convert to netCDF	CDRP	28-Jun	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Draft Submission Agreement (SA)	TM, Archive	29-Jun	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Deliver SA to PI for review	TM	29-Jun	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Deliver: source code samples	PI	30-Jun	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Review: source code samples	TM, Archive	7-Jul	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Make CDR Product available on THREDDS	TM	7-Jul	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Deliver: Flow Chart, Maturity Matrix	PI	11-Jul	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Review: Flow Chart and MM	TM, CDRP	13-Jul	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Provide comments on Flow chart and MM	TM	13-Jul	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Convert sample files to netCDF	Ops	13-Jul	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Review netCDF sample files	TM, Archive, PI	15-Jul	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Create checksums for ASCII data	PI	29-Jul	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Finalize SA	Archive, PI, TM	29-Jul	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Deliver ASCII Data Files according to SA	PI	2-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Archive ASCII datasets	Archive	4-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Incorporate feedback from sample files	Ops	5-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Deliver: Final versions of flow chart and MM	PI	9-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Verify Flow chart and MM	TM, CDRP	10-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Deliver: Complete set of documented Source Code with README	PI	12-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Verify source code and README	TM, CDRP	15-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Enter source code into subversion for security review	TM, Ops	15-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Create source code header document (robodoc)	Ops, CDRP	15-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Create final CDR netCDF files	Ops	25-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Create and Deliver: Draft CATBD to NCDC	Roy Spencer	26-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Review: draft CATBD	TM	30-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Conduct security review	ITB	29-Sep	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Return comments on draft CATBD	TM	31-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Provide feedback on any security issue found as courtesy to PI	TM	31-Aug	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Deliver Final CATBD	PI	22-Sep	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Archive CDR netCDF data set	Archive, OPS	20-Sep	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Archive code pkg: (source code, README, Security Review, headerdoc)	Archive, OPS, TM	29-Sep	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Archive Documentation pkg: (flow chart, MM, CATBD)	Archive, OPS, TM	27-Sep	done	
MLT - Christy	Lei	Jones	Robert	Ansari	Make CDR Product available on THREDDS	Access	29-Sep	done	
MLT - Christy	Lei	Ken	Robert	Ansari	Update CDR website with links to source code, documents, and dataset	Access, Archive	30-Sep	95%	TBD
MLT - Christy	Lei	Jones	Robert	Ansari	Final CDR Program Management Review	CDRP	30-Sep		TBD

    PI: Christy (UAH)   **RSAD Transition Manager : Shi**

FY12 TCDR - Sea Ice

CDR Product: TCDR - Sea ice concentration, 1979-2010 (20 GB)
GEOSS Societal Benefit: Climate, Water, Ecosystems, Agriculture

Project Status

- **No Change**
- NSIDC created final dataset and hosted on their web site
  - Pulled and archived dataset
- All pieces archived and ready for IOC release.
- CDRP office decisions:
  - Expect future modularized code from PI (in line with CDRP code requirements for being self contained / portable)
  - Expect reprocessing of dataset this Fall with new RSS data
  - Need a contract in place for FY12 deliveries

Next Action / Milestone

- Archive dataset (9/22) - done
- Update web page with links (TBD)

(G)

Project Risks

- All pieces are in place for IOC release
- **If a modular/self contained code and reprocessing with new RSS data is expected - it should be outlined in a contract**

ID	Task Name	Status	Start	Stop	FY11 Q3			FY11 Q4			FY12 Q1			FY12 Q2		
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	Initial Assessment	100	12/7/2010	1/7/2011												
2	Transfer Prep	100	1/7/2011	9/15/2011	██						Modularize Code and Reprocess					
2a	Comment Source Code	100	4/15/2011	8/15/2011												
2b	Create Docs (CATBD, Flow Chart, MM, Readme)	100	1/7/2011	8/30/2011												
2c	Convert data from binary to NetCDF	100	3/1/2011	9/15/2011												
3	Tranfer Code, Docs, and Data	100	7/15/2011	9/15/2011				██								██
4	Verify Code, Docs, and Data	100	7/31/2011	9/15/2011					██							██
5	Archive Code, Docs, and Data	100	8/15/2011	9/21/2011						██						██
6	Provide Access to Code, Docs, and Data	90	9/1/2011	9/30/2011							██					██

PREDECISIONAL DRAFT INFORMATION

PI: Meier (NSIDC)   RSAD Transition Manager: Peng

Sea Ice

CDR - PI	TM	AB	OPS	ACCESS	What	Who	NLT date	Status	ECD
Sea Ice - Meier	Peng	Jones	Robert	n/a	Send Draft SA to PI	TM	11-Jul	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Receive comments back on SA	PI	18-Jul	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Deliver: completed sample Files, Draft CATBD, Partial code	PI	15-Aug	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Review: completed sample files	TM, Archive	18-Aug	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Review: CATBD	TM	19-Aug	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Review: source code	TM, CDRP	19-Aug	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Return comments on sample files, CATBD, and code	TM	22-Aug	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Finalize SA	TM, Archive	24-Aug	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Deliver: Flow Chart, Maturity Matrix	PI	23-Aug	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Review: Flow Chart	TM, CDRP	25-Aug	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Review: Maturity Matrix	TM, CDRP	25-Aug	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Provide comments on Flow chart and MM	TM	26-Aug	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Deliver: Final versions of flow chart, MM, CATBD	PI	1-Sep	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Deliver: Initial set of NSIDC Product Suite Source Code with README	PI	30-Aug	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Enter source code into subversion for security review	TM, Ops	31-Aug	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Review: source code modules and README	TM, CDRP	2-Sep	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Create source code header document (robodoc)	Ops, CDRP	6-Sep	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Conduct security review	ITB	7-Sep	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Provide feedback on any issue found	TM	8-Sep	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Archive source code package w/ README, sec review, and headerdoc	Archive, OPS, TM	9-Sep	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Archive documentation (flow chart, MM, CATBD)	Archive, OPS, TM	9-Sep	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Deliver: Complete Data Set	PI	20-Sep	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Make CDR Product available on web	PI	20-Sep	done	
Sea Ice - Meier	Peng	Jones	Robert	n/a	Archive complete data set	Archive, OPS	22-Sep	done	
Sea Ice - Meier	Peng	Ken	Robert	n/a	Provide links to source code, documents, and dataset	Archive	23-Sep	95%	TBD
Sea Ice - Meier	Peng	Jones	Robert	n/a	Final CDR Program Management Review	CDRP	28-Sep		TBD
Sea Ice - Meier	Peng	Jones	Robert	n/a	Create SOW for any items that are needed to meet CDR requirements	TM, CDRP	15-Oct		
Sea Ice - Meier	Peng	Jones	Robert	n/a	Contract for Reprocessing Delivery and Source Code Modularization	CDRP	30-Oct		
Sea Ice - Meier	Peng	Jones	Robert	n/a	Reprocess Sea Ice CDR with new RSS data	PI	15-Jan		
Sea Ice - Meier	Peng	Jones	Robert	n/a	Host new dataset on web, delivery copy to NCDC	PI	9-Feb		
Sea Ice - Meier	Peng	Jones	Robert	n/a	Deliver: Sea Ice Concentration Modular Source Code with README	PI	16-Feb		
Sea Ice - Meier	Peng	Jones	Robert	n/a	Replace source code and data in archive	Archive	23-Feb		
Sea Ice - Meier	Peng	Jones	Robert	n/a	Update CDR web page	Archive	2-Mar		
Sea Ice - Meier	Peng	Jones	Robert	n/a	Final CDR Program Management Review - FY12 CDR complete	CDRP	30-Mar		

FY12 Candidate CDR - Ozone Bundle

CDR Product: TCDR – Ozone Bundle, 19xx-20xx (xx GB)
GEOSS Societal Benefit: TBD

Project Status

- Letter sent to PI - requesting commitment to R2O process
- **Initial Assessment completed**
  - **Potentially ~~3~~ / 2 Candidate CDRs:**
- **Need CDR PMO review of assessment**
  - **TM will need decision before he can proceed**

Next Action/Milestone

- Letter to PI (10/14) - done
- Initial Assessment (10/28) – done
- Decide on CDR(s) to transition -

(Y)   **Project Risks**

- Many unknowns until PI commits and transition schedule is completed

ID	Task Name	Status	Start	Stop	FY12 Q1			FY12 Q2			FY12 Q3			FY12 Q4		
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Initial Assessment	0														
2	Transfer Prep	0														
2a	Comment Source Code	0														
2b	Create Docs (CATBD, Flow Chart, MM, Readme)	0														
2c	Create NetCDF Dataset	0														
3	Tranfer Code, Docs, and Data	0														
4	Verify Code, Docs, and Data	0														
5	Archive Code, Docs, and Data	0														
6	Provide Access to Code, Docs, and Data	0														

PREDECISIONAL DRAFT INFORMATION

PI: Flynn (STAR)   RSAD Transition Manager: Zhao

FY12 Candidate CDR - Vegetation Bundle

CDR Product: TCDR – Vegetation Bundle, 19xx-20xx (xx GB)
GEOSS Societal Benefit: TBD

Project Status

- **Letter sent to PI - requesting their commitment to R2O process**
- **PI is visiting for CICS science meeting – will introduce TM**
- Initial Assessment needed
  - **Potentially 3 Candidate CDRs**
    - **-- Vegetation Index**
    - **-- Fractional Photosynthetically Active Radiation (FPAR)**
    - **-- Leaf Area Index (LAI)**

Next Action/Milestone

- Letter to PI (10/14) - done
- Initial Assessment (11/18)

(Y) ## Project Risks

- Many unknowns until PI commits and assessment is completed

ID	Task Name	Status	Start	Stop	FY12 Q1			FY12 Q2			FY12 Q3			FY12 Q4		
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Initial Assessment	0														
2	Transfer Prep	0														
2a	Comment Source Code	0														
2b	Create Docs (CATBD, Flow Chart, MM, Readme)	0														
2c	Create NetCDF Dataset	0														
3	Tranfer Code, Docs, and Data	0														
4	Verify Code, Docs, and Data	0														
5	Archive Code, Docs, and Data	0														
6	Provide Access to Code, Docs, and Data	0														

    PI: Vermote (U of Md)   RSAD Transition Manager: Nelson

FY12 Candidate CDR - NH Snow Cover

CDR Product: TCDR – NH Snow Cover, 19xx-20xx (xx GB)
GEOSS Societal Benefit: TBD

Project Status

- **Jeff talked to PI – requesting his commitment to R2O process**
- Initial Assessment needed
  - **Potentially 2 Candidate CDRs**
    - **-- Terrestrial Snow cover**
    - **-- Sea Ice melt onset**

Next Action/Milestone

- Letter to PI (10/14) - done
- Initial Assessment (11/18)

(Y)   **Project Risks**

- Funding - SDS 2008
- Many unknowns until PI commits and assessment is completed

ID	Task Name	Status	Start	Stop	FY12 Q1			FY12 Q2			FY12 Q3			FY12 Q4		
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Initial Assessment	0														
2	Transfer Prep	0														
2a	Comment Source Code	0														
2b	Create Docs (CATBD, Flow Chart, MM, Readme)	0														
2c	Create NetCDF Dataset	0														
3	Tranfer Code, Docs, and Data	0														
4	Verify Code, Docs, and Data	0														
5	Archive Code, Docs, and Data	0														
6	Provide Access to Code, Docs, and Data	0														

PREDECISIONAL DRAFT INFORMATION

PI: Robinson (Rutgers Univ)   RSAD Transition Manager: Young

FY12 Candidate CDR - Mean Layer Temperature - RSS

CDR Product: xCDR – Atmospheric Temperature Profile, 19xx-20xx (xx GB)
GEOSS Societal Benefit: TBD

Project Status

- Letter sent to PI – requesting his commitment to R2O process
- **PI was at NCDC for CICS science meeting – introduced TM**
  - **Talked with PI at CICS meeting, he is ready to start**
- Initial Assessment needed
  - **1 Candidate CDR**

Next Action/Milestone

- Letter to PI (10/14) - done
- Initial Assessment (11/18)

(Y)   ## Project Risks

- Funding - SDS 2008
- Many unknowns until PI commits and assessment is completed

ID	Task Name	Status	Start	Stop	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
					FY12 Q1			FY12 Q2			FY12 Q3			FY12 Q4		
1	Initial Assessment	0														
2	Transfer Prep	0														
2a	Comment Source Code	0														
2b	Create Docs (CATBD, Flow Chart, MM, Readme)	0														
2c	Create NetCDF Dataset	0														
3	Tranfer Code, Docs, and Data	0														
4	Verify Code, Docs, and Data	0														
5	Archive Code, Docs, and Data	0														
6	Provide Access to Code, Docs, and Data	0														

PI: Mears (RSS)   RSAD Transition Manager: Kim
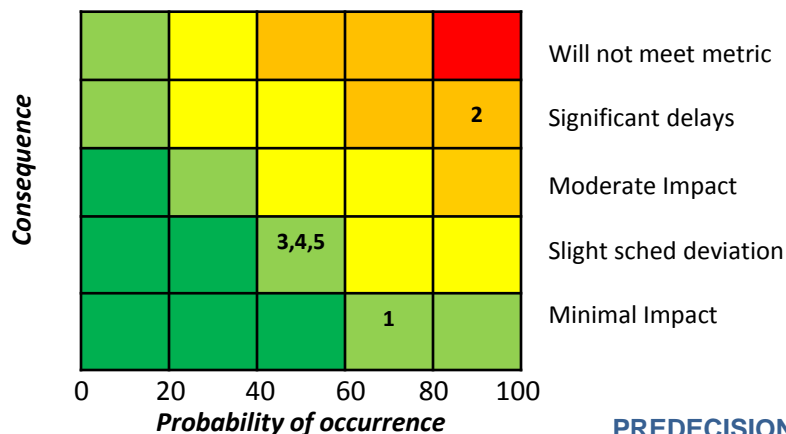
CDR Program Office
NPP/JPSS Climate Raw Data Records (C-RDRs) Project

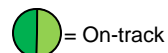## Weekly Report – November 10, 2011

- **VIIRS**
  - (1) • Coding the VIIRS C-RDR generator application in ADL.
- **CrIS**
  - (2) • Delaying CrIS C-RDR development until proprietary issues are resolved.
- **ATMS**
  - (3) • Developing code to write the ATMS C-RDR.
- **OMPS Nadir**
  - (4) • Developing code to write the OMPS Nadir C-RDR.
- **System Infrastructure**
  - (5) • Developing ingest processing for RDRs.
  - • **Updating system acceptance test (SAT) document.**
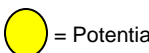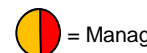
● No change ↑ Increasing Risk ↓ Decreasing Risk

C-RDR Project	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
NPP Milestones					NCT3 II			NCT4			Launch		Data				
VIIRS																	
CrIS																	
ATMS																	
OMPS Nadir																	
System Infrastructure																	

R2O PHASE: ANALYSIS | DESIGN | DEVELOPMENT | INTEGRATION | TEST | OPERATIONAL

Risk Matrix

Consequence (y-axis, top to bottom):
- Will not meet metric
- Significant delays — **2**
- Moderate Impact
- Slight sched deviation — **3,4,5**
- Minimal Impact — **1**

Probability of occurrence (x-axis): 0 20 40 60 80 100

Risk and Mitigation

VIIRS, CrIS, ATMS, OMPS Nadir –
- Operational software is under maintenance, updated versions may affect C-RDR ported version.
- Contractor claims CrIS DR software is proprietary so cannot use for development. Delay till claim is resolved.

System Infrastructure –
- Reliability of NPP RDRs from CLASS. Need to test ingest of RDRs from CLASS and develop an automated mechanism for re-requesting data.
- Ability of CLASS to handle the frequency and volume of NPP data. CLASS has been successful during system tests.

11/14/2011

● = On-track ● = Potential management action required ● = Management attention required

Visible Infrared Imaging Radiometer Suite (VIIRS)

C-RDR Product: Raw sensor measurements with usage and provenance metadata in easily accessible netCDF4 format
GEOSS Societal Benefit: Climate, Water, Ecosystems, Agriculture, Biodiversity, Energy

Project Status

- **Completed writing science data to C-RDR, finishing writing metadata.**
- Completed test the code that writes the engineering data.
- Wrote the output software for the spacecraft diary data.
- Completed test of code that writes VIIRS Support Data.
- Tracked down inconsistencies with PC files (docs vs code).
- Completed C-RDR Packer and UnPacker framework for VIIRS Supporting Data.
- Obtained and built the full release of ADL 3.0.
- Updated the VIIRS Product Specification.
- Developing software to create the C-RDR, reusing the ADL.
- Completed release of netCDF4 file creation toolset.

Next Action / Milestone

- Development complete for the VIIRS C-RDR.

Ⓖ

Project Risks

- Complexity of the NPP/JPSS RDRs and operational software
- Operational software is under maintenance, updated versions may affect C-RDR ported version

Project Schedule

ID	Task Name	Status	Start	Stop	FY11 Q4 Jul	Aug	Sep	FY12 Q1 Oct	Nov	Dec	FY12 Q2 Jan	Feb	Mar	FY12 Q3 Apr	May	Jun
1	Analysis	Completed	10/23/2009	5/4/2010												
2	Design	Completed	5/6/2010	1/5/2011												
3	Development	60.00%	1/6/2011	10/4/2011												
3a	Develop VIIRS processing component	90.00%	1/6/2011	10/28/2011												
3b	Test VIIRS processing component	50.00%	10/13/2011	11/4/2011												
4	Integration		11/7/2011	1/6/2011												
5	Test		12/23/2011	1/27/2012												
5a	Dry Runs/some with launch data		12/23/2011	1/26/2012												
5b	System Acceptance Test		1/27/2012	1/27/2012												
6	Operational		1/28/2012													

Cross-track Infrared Sounder (CrIS)

C-RDR Product: Raw sensor measurements with usage and provenance metadata in easily accessible netCDF4 format
GEOSS Societal Benefit: Climate, Water, Energy

Project Status

- Obtained CrIS SDR code for ADL. Code is for government access only. Holding the code until proprietary issues are resolved.
- Developing and debugging code to create data structures for writing the C-RDR.
- Creating a MATLAB reader for the C-RDR to provide easy access.
- Evaluating processing of C-RDR with MATLAB and IDL
- Defining the netCDF4 structure for the C-RDR and developing software for writing the C-RDR.
- Ported operational algorithms (Space Dynamics Lab at Utah State)

Next Action / Milestone

- Delay until the CrIS SDR code is releasable. JPSS Program Office is working to resolve proprietary claims with BOMEM.
- Complete definition of CrIS C-RDR

O   ## Project Risks

- CrIS science algorithms not available to contractors: C-RDR team, cal/val teams, ADL developer cannot get CrIS SDR code. Our current version of CrIS code is from 2007.
- NPP Launch Date: October 25, 2011
- Complexity of the NPP/JPSS RDRs and operational software
- Operational software is under maintenance, updated versions may affect C-RDR ported version. Mitigated by using ADL.

Project Schedule

ID	Task Name	Status	Start	Stop	FY11 Q2			FY11 Q3			FY11 Q4			FY12 Q1			FY12 Q2		
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	Analysis	Completed	8/16/2010	11/24/2010															
2	Design	90.00%	11/26/2010	2/15/2011															
3	Development		2/16/2011	7/22/2011															
3a	Develop CrIS processing component	60.00%	2/16/2011	5/11/2011															
3b	Test CrIS processing component		5/12/2011	7/22/2011															
4	Integration		7/25/2011	8/19/2011															
5	Test		9/1/2011	12/19/2011															
5a	Dry Runs/some with launch data		9/1/2011	12/12/2011															
5b	System Acceptance Test		12/12/2011	12/19/2011															
6	Operational		12/20/2011																

DELAYED

POC: Burden

Advanced Technology Microwave Sounder (ATMS)

C-RDR Product: Raw sensor measurements with usage and provenance metadata in easily accessible netCDF4 format
GEOSS Societal Benefit: Climate, Water, Energy

Project Status

- **Writing the output software for the C-RDR.**
- **Creating the software framework for the Support Data Packer.**
- Updated C-RDR specification.
- Defining the C-RDR format, contents, and metadata
- Identifying code and data structures required for C-RDR processing.
- Verified processing of ATMS algorithms
- IDPS ATMS algorithm executing in ADL at NCDC
- Obtained ported operational algorithms (Space Dynamics Lab at Utah State)

Next Action / Milestone

- Develop the code to produce the C-RDR.

(G)

Project Risks

- Complexity of the NPP/JPSS RDRs and operational software
- Operational software is under maintenance, updated versions may affect C-RDR ported version
- Developer shares time working NPP and CLASS issues.

Project Schedule

ID	Task Name	Status	Start	Stop	FY11 Q4			FY12 Q1			FY12 Q2			FY12 Q3		
					Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1	Analysis	Complete	10/29/2010	2/10/2011												
2	Design	95.00%	2/11/2011	4/29/2011												
3	Development	35.00%	5/2/2011	12/7/2011												
3a	Develop ATMS processing component	70.00%	5/2/2011	11/18/2011												
3b	Test ATMS processing component		11/10/2011	12/7/2011												
4	Integration		12/8/2011	1/12/2011												
5	Test		1/13/2011	1/27/2012												
5a	Dry Runs/some with launch data		1/13/2011	1/26/2012												
5b	System Acceptance Test		1/27/2012	1/27/2012												
6	Operational		1/28/2012													

POC: Saunders

Ozone Mapping Profile Suite (OMPS) Nadir

C-RDR Product: Raw sensor measurements with usage and provenance metadata in easily accessible netCDF4 format
GEOSS Societal Benefit: Climate, Energy

Project Status

- **Debugging code that writes spacecraft diary data.**
- **Identifying required support data.**
- Wrote science output classes for OMPS C-RDR.
- Analyzing the OMPS SDR ADL code for use in the C-RDR.
- Setting up OMPS Nadir and ADL code for development.
- Developing code to initialize and fill in the C-RDR file.
- Created second draft of OMPS Nadir C-RDR prototype.
- Analyzing IDPS algorithms and documents to define the OMPS Nadir C-RDR structure.
- OMPS Nadir algorithms will be released in ADL 3.0.
- Analyzing the IDPS software for the OMPS Nadir SDR for the use in developing the C-RDR

Next Action / Milestone

- Define the C-RDR format, contents, and metadata

Project Risks

(G)

- Complexity of the NPP/JPSS RDRs and operational software
- Operational software is under maintenance, updated versions may affect C-RDR ported version

Project Schedule

ID	Task Name	Status	Start	Stop	FY11 Q4			FY12 Q1			FY12 Q2			FY12 Q3		
					Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1	Analysis	100.00%	5/23/2011	7/12/2011	▮											
2	Design	80.00%	7/13/2011	9/28/2011	▮	▮	▮									
3	Development	30.00%	9/29/2011	2/7/2012				▮	▮	▮	▮	▮				
3a	Develop OMPS NP processing component	65.00%	9/29/2011	12/19/2011				▮	▮	▮						
3b	Test OMPS NP processing component		12/20/2011	2/7/2012						▮	▮					
4	Integration		2/8/2012	3/6/2012								▮				
5	Test		3/7/2012	3/14/2012									▮			
6	Operational		3/15/2012											▮	▮	▮

11/14/2011

POC: Burden

C-RDR System Infrastructure

C-RDR Product: Infrastructure to automate the production of the C-RDRs.
GEOSS Societal Benefit: None

Project Status

- **Developing code for ingest detection and processing (handling manifests).**
- Completed NPP 14 day Ground Operations Exercise (GOE).
- Analyzed data received during NCT4.
- Receiving RDRs from CLASS via subscription during NCT4.
- Completed throughput testing for SIPGenSys.
- Successfully transferred files from FTP Farm to Blade Center and ingested for RDR throughput test.
- Creating database tables and access procedures for config files.
- Setting up configuration files and software for the ingest test.
- Developing an ingest test using the aggregated RDRs.

Next Action / Milestone

- Complete coding of C-RDR ingest functions.

G

Project Risks

- Ability of CLASS to provide full stream of RDRs and ability to ingest stream of C-RDRs. Ability of CLASS to provide RDRs will be tested during NCT4.
- Need to develop an automated re-request mechanism for CLASS.

Project Schedule

ID	Task Name	Status	Start	Stop	FY11 Q4			FY12 Q1			FY12 Q2			FY12 Q3		
					Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1	Analysis	Completed	9/29/2010	4/22/2011												
2	Design	70.00%	4/25/2011	7/8/2011												
3	Development	55.00%	5/31/2011	11/28/2011												
3a	Develop infrastructure	50.00%	5/31/2011	11/14/2011												
3b	Test infrastructure	70.00%	9/27/2011	11/28/2011												
4	Integration	30.00%	9/26/2011	1/6/2012												
5	Test		12/23/2011	1/27/2012												
5a	Dry Runs/some with launch data		12/23/2011	1/26/2012												
5b	System Acceptance Test		1/27/2012	1/27/2012												
6	Operational		1/28/2012													

POC: Copley